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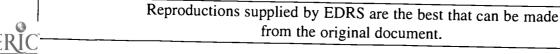
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#### **ABSTRACT**

This paper describes an undergraduate level course developed with the dual agenda of teaching students basic empirical research skills and permitting them to explore concerns related to the workplace. Familiarizing students with workplace issues can assist them in making appropriate career choices and can help them to formulate plans for making a difference in the organizations they will soon join. While reading and discussing issues related to the workplace can foster greater awareness and understanding, these somewhat detached and impersonal ways of learning do not always fully engage students. In order to address this, an Introductory Research Methods class was invited to participate in an active engagement experience involving conduct of an empirical investigation of employee attitudes. Members of the class selected the topic for their research consensually. They then defined the variables they wanted to investigate, including the relationship between the size of the workplace, gender and age of the employees, job satisfaction, level of stress, engagement in discretionary activities, technology training satisfaction, and problems in juggling competing responsibilities. They surveyed workers at a variety of companies and analyzed the data. The class discussed their findings at length and developed an action plan based on problems detected through their study. The results of their efforts were presented at a local psychology research conference. The students reported extremely high satisfaction with this learning experience and requested to use this method again in additional courses. The appendix includes samples of the papers these novice research students produced as a visible product of their active engagement with the subject matter. Also included is a lesson plan that lists topics covered over the 15-week undergraduate course, an un-graded pretest, and excerpts from the midterm exam. (Author/MKA)





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Educating Students about the World of Work:

An Example of Active Engagement Pedagogy

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2000

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#### ABSTRACT

This paper describes an undergraduate level course developed with the dual agenda of (1) teaching students basic empirical research skills and (2) permitting them to explore concerns related to the workplace. Familiarizing students with workplace issues can assist them in making appropriate career choices, and can help them to formulate plans for making a difference in the organizations they will soon join. While reading and discussing issues related to the workplace (such as ageism and sexism) can foster greater awareness and understanding, these somewhat detached and impersonal ways of learning do not always fully engage students. In order to address this, an Introductory Research Methods class was invited to participate in an active engagement experience involving conduct of an empirical investigation of employee attitudes. Members of the class selected the topic for their research consensually. They then defined the variables they wanted to investigate, including the relationship between the size of workplace, gender and age of employee, job satisfaction, level of stress, engagement in discretionary activities, technology training satisfaction, and problems in juggling competing responsibilities. They surveyed workers at a variety of companies, and analyzed the data. The class discussed their findings at length, and developed an action plan based on problems detected through their study. The results of their efforts were presented at a local psychology research conference. The students reported extremely high satisfaction with this learning experience, and requested to use this method again in additional courses. The appendix includes samples of the work these novice research students produced as a visible product of their active engagement with the subject matter.

#### Introduction

Engaging students in the learning process increasingly requires use of creative alternatives to the traditional lecture method of teaching. Today's students are excited when abstract concepts are made relevant to their own lives, and are eager to participate actively in their educational experience. Providing students with opportunities to achieve, both individually and in small work groups, often maximizes their learning. In order to foster greater competence and confidence in a class of reluctant first year psychology research students, an undergraduate level research methods course was developed with the following dual agenda in mind: (1) teaching students basic empirical research skills and statistical analysis techniques and (2) permitting them to explore concerns related to the workplace.

Familiarizing students with workplace issues can assist them in making appropriate career choices, and can help them to plan ways they can make a difference in the organizations they will soon join. While reading and discussing issues related to the workplace (such as ageism and sexism) can foster greater awareness and understanding, these somewhat detached and impersonal ways of learning do not always fully engage students. In order to address this, an Introductory Research Methods class was invited to participate in an active engagement experience involving conduct of an empirical investigation of employee attitudes. Members of the class selected the topic for their research consensually. They then defined the variables they wanted to investigate, including the relationship between the size of workplace, gender and age of employee, job satisfaction, level of stress, engagement in discretionary activities, technology training satisfaction, and problems in juggling competing responsibilities. They surveyed workers at a variety of companies, and analyzed the data. The class discussed their findings at length, and developed an action plan based on problems detected through their study.

Ambitious expectations, an emphasis on collaborative effort, and a translation of general research principles into specific projects enabled students to make striking gains during the semester. The appendix includes sample student research papers produced as a result of this educational experience. Students also presented their findings at a psychology research conference. Feedback to the instructor was overwhelmingly positive (e.g., "Research is not a mystery any more. It is no longer something only other people do. It is something I can do too.").



## Lesson Plan An Active Engagement Learning Experience Course: Exploring Work-related Themes Via Research

#### Week One

Presentation of concepts central to empirical research.

Review basic statistical concepts: distributions, central tendency, variance, etc.

Distinguish between independent and dependent variables.

Distinguish between correlational and experimental research designs.

Begin background reading on work-related issues

#### Week Two

Distinguish between statistical and "real world" significance. Distinguish between within and between group variation. Review examples of different types of studies. Read sample articles' methods and results sections. Conduct Internet exploration of materials on workplace issues.

#### Week Three

Discuss Operationalization of variables.
Distinguish among different types of measurement.
Evaluate pros and cons associated with different types of measures.
Summarize key areas of interest obtained through background reading and Internet exploration Divide class into small project groups (students choose topic of greatest interest)

#### Week Four

Evaluation of knowledge. Complete objective test. Interpret sample journal articles.

#### Week Five

Select Topics for Collaborative projects
Frame research project hypotheses
Delineate all variables to be assessed in the survey
Write sample questions for survey
Discuss pros and cons of sample questions
Discuss scaling options & sampling procedures
Begin writing Introduction sections of research papers



#### Week Six

Develop Survey instrument collaboratively
Review all items generated by class members using overhead projection
Deliberate about various items
Assess coverage of each variable
Review each variable's relevant items
Discuss scoring of variable subscales

Week Seven

Produce, duplicate, and administer survey Write Methods Sections of research papers

Week Eight

Enter data from all surveys
Discuss strategies for naming variables
Revise Drafts of Introduction sections

Week Nine

Analyze data
Discuss implications of all statistical analyses
Outline Results sections of each paper

Week Ten

Write Abstract and Results sections of research papers

Week Eleven

Write Discussion sections of each paper

Week Twelve

Prepare research abstracts for submission to research conference

Week Thirteen

Prepare posters for presentation at research conference Outline oral presentations of each research project



#### Week Fourteen

Conduct practice oral presentations of each research project Critique one another's work; complete feedback sheets on peers Complete feedback sheets on instructor

Week Fifteen

Present findings at research conference Collect finished papers



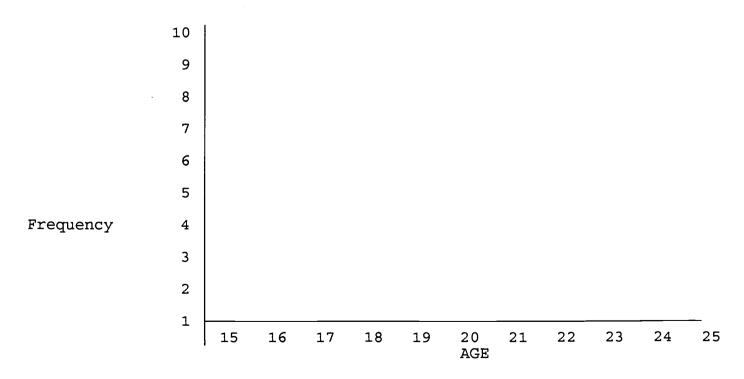
#### Ungraded Pretest on Research Methods Concepts

A study was conducted on men and women at a small liberal arts college. The following data indicate their self-reported age in years and their self-reported weight in pounds.

Is this an experiment?

	Males		Females
age	weight	age	weight
18 21 18 20 19 18 19 20	195 175 160 180 165 170 185 190	18 19 18 20 20 18 21	110 109 111 109 110 110 111
Calculate	the following n=	n=	n=
X=	X=	X=	X=

Using 2 pens or pencils of different colors, (1 color for males, 1 color for females), plot the data for each variable:





Frequency WEIGHT

As you look at the data, what do you notice about group differences on the age variable?

What do you notice about group differences on the weight variable?

How might you interpret the group comparison findings based on this data?

List 4 types of dependent variables.

Can you assess sex differences by conducting an experimental study? Why or why not?

What does it mean when within-group variability exceeds between group differences?

If the differences between two groups is statistically significant, does this indicate that the two groups are always importantly different in "real world" terms?
Why or why not?



#### Excerpts from Research Methods Course Midterm Exam

Answer the following questions about the Domingo et al (1994) study, entitled "Relations of early maternal employment and attachment in introvertive and extravertive adults", by consulting the copy of the article distributed in class along with your exam.

- 1. Is this an experimental study? In it, are the variables studied experimentally?
- a.yes
- b.no
- c.it is partly experimental and partly correlational
- 2. How many human subjects were used in this study?
- a.10
- b.20
- c.60
- d.106
- 3. How many animal subjects were used in this study?
- a.0
- b.20
- c.60
- d.106
- 4. Was this a retrospective study?
- a.yes
- b.no
- 5. Was this a longitudinal study?
- a.yes
- b.no
- 6. In this study were age effects studied cross-sectionally?
- a.yes
- b.no
- 7. Did this study use only introductory psychology class students as subjects?
- a.yes
- b.no
- 8. What dependent measure was used in this study?
- a.scores on the Adult Attachment Scale
- b.1-minute exposure to music
- c.distance ridden on stationary bike in 2 minutes
- d.scores on the WAIS intelligence scale



- 9. Where was this study conducted?
- a.Penn State
- b.University of Pennsylvania
- c.Ursinus College
- d. none of the above
- 10. Where was this article published?
- a.American Psychologist
- b.Perceptual and Motor Skills
- c.Psychological Reports
- d.none of the above
- 21. Which of the following is a problem associated with using an observer to conduct behavioral ratings?
- a.cost
- b.reactivity
- c.interrater reliability problems
- d.all of the above
- e. none of the above
- 22. Which of the following is a problem associated with using self report measures?
- a.social desirability responding
- b. subjects' varying frames of reference
- c.unmotivated respondents
- d. all of the above
- e. none of the above
- 23. Cross-sectional research designs are most often compromised by which of the following problems?
- a.social desirability responding
- b.reactivity
- c.cohort or generational confounding
- d.all of the above
- e.none of the above
- 24. Most psychological research is based on the study of
- a.young children in preschool settings
- b.undergraduate students in university settings
- c.employed middle aged adults in management positions
- d.residents of nursing homes



#### APPENDIX: SAMPLE STUDENT RESEARCH PAPERS

#### ASSESSING THE RELATIONSHIP BETWEEN WORKPLACE SIZE AND

#### **EMPLOYEE PERCEPTIONS**

Laura Gorton Lynn Hamilton Adele Hinckley Christine Guth

**Ursinus College** 

#### **ABSTRACT**

Sixty-eight employees with a mean age of 39.2 years, from various workplaces in a suburb of Philadelphia served as participants. The group consisted of 27 men and 41 women. A 30-item Likert-format survey assessing perceptions of challenge and stimulation at work, consequences and rewards for performance, training effectiveness, competing family demands, and employee stress was administered to all participants. Measures of satisfaction with work place performance and willingness to engage in discretionary activities were also obtained.

#### INTRODUCTION

Several studies have investigated the effects of various aspects of organizational structure on individual and organizational behavior (Landy, 1985). One study involving farm cooperatives (Moch, 1976) concluded that less formal structures evolved in smaller firms (under 10 employees), while the structure became much more formal as size increased, suggesting that organizational size has certain constraining effects on behavior. In contrast, an examination of hospitals with over 400 employees concluded that increased size led to functional differentiation and decentralization of decision making (Moch, 1976; Landy, 1985). These two studies suggest that size per se is not the most critical variable in organizational functioning (Landy, 1985). Decentralized and flat organizations of any size enable more direct communication within and across functions. Functional familiarity is the key to organizational efficiency (Schein, 1999). Large organizations can operate as optimally as smaller organizations if separate working groups or departments share common goals and communicate openly.

Employee satisfaction is generally thought to be higher in flat organizations. One study found that the individuals in flat organizations reported more satisfaction in terms of self-actualization and autonomy needs, experienced less stress, and performed more efficiently than individuals in either medium or tall organizations (Ivancevich & Donnelly, 1975; Landy, 1985).



The two organizational designs are classical and neoclassical. The classical approach calls for organizations to be designed with a rigid, tall hierarchy, with a narrow span of control (allowing managers to maintain close supervision over their subordinates). In contrast, the neoclassical approach argues for designing organizations with flat hierarchical structures (minimizing managerial control over subordinates) and a high degree of decentralization (encouraging employees to make their own decisions). Such classical theorists as Max Weber, Fredrick Taylor, and Henri Fayol believed that effective organizations were ones that had a formal hierarchy, a clear set of rules, specialization of labor, highly routine tasks, and a highly impersonal working environment (Greenberg & Baron, 1993). This model did not take into account the realities of the world, in part because it is insensitive to human needs and is not suited to a changing environment. A neoclassical theorist, Douglas McGregor, argued that people desire to achieve success by working and that they seek satisfaction by behaving responsibly (Greenberg & Baron). Another neoclassical theorist, Chris Argyris, also argued that managerial domination of organizations blocks basic human needs to express oneself and to successfully accomplish tasks (Greenberg & Baron).

According to Schein, functional familiarity typically decreases with organizational growth. This growth results in more formal processes for communicating and reduced personal contact. As deals have to be negotiated with strangers, trust levels erode, and political processes begin to replace teamwork in pursuit of common goals (Schein, 1999). Therefore, organizational growth is likely to result in a classical organizational structure.

In addition, as the size of work subgroups increases, the probability of finding a competitive, insensitive, or suspicious subgroup member also goes up. The presence of such individuals can have a distorting influence on the whole organization, by thwarting cooperation among subgroups. When work subgroups are smaller, they are more likely to eliminate such difficult members, because the difficult members' effects are so obviously disruptive. Larger organizations often permit such employees to remain, because their impact is less visibly ruinous when their actions are buffered by a larger group of peers, and because the larger subgroup has greater difficulty reaching consensus about the need to remove the difficult party.

We anticipate that the findings of our study will indicate that employees in smaller organizations will report higher levels of job satisfaction. We also expect employees in these smaller organizations to show lower stress levels from job responsibilities and family/work conflicts. In addition, we expect reports of greater opportunities for personal fulfillment in smaller organizations, due to their less structured environment.

#### **METHODS**

#### **PARTICIPANTS**

Sixty-eight employees from various workplaces in a suburb of Philadelphia served as participants. The group consisted of 27 men and 41 women, with an overall mean age of 39.2 years.



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#### **QUESTIONNAIRE**

A 30-item Likert-format survey was administered to all participants. The survey assessed perceptions of challenge and stimulation at work, consequences and rewards for performance, training effectiveness, competing family demands, and employee health. Measures of satisfaction with work place performance were also obtained.

#### RESULTS

Responses from the sample of 68 employees in suburban Pennsylvania were analyzed in terms of size of workplace setting. Between group t tests were used to compare employees of small businesses to those working in corporate settings. Significant differences emerged on several variables; in every case, small business employees reported more positive perceptions of the work environment than their corporate counterparts.

Results showed that employees in a small business had lower stress levels at work. Small business employees were less often required to balance parenthood with job responsibilities than corporate employees. Small business employees felt that the number of hours given to their job was rarely affected by having school-aged children, whereas corporate employees sometimes felt their hours were affected. Small business employees usually felt they received a sufficient amount of training at work to allow them to keep up with technological changes, and corporate employees only sometimes felt they received enough training. However, there was no significant difference between the two groups as to whether training was actually useful to job performance. Small business employees usually felt able to express opinions or offer suggestions without fear of repercussions, to a greater degree than corporate employees. Small business employees more often felt properly rewarded for their efforts than corporate employees. A trend in the data suggested that small business employees met the demands of their jobs more frequently than corporate employees.

Question	P	Corp Mean	Sm Bus Mean	t	df
Stress	.004	3.59	2.95	3.02	66
Parent	.03	3.54	2.61	2.22	64
School	.016	2.41	1.65	2.48	64
TrainSuff	.002	2.72	3.59	-3.26	66
No Fear	.046	3.31	3.80	-2.03	66
Reward	.05	2.55	3.00	-2.00	66
Meet	.06	4.10	4.36	1.91	66

Of the seven questions that showed statistical significance (p = <.05) in the comparison of Corporate environment versus Small Business environment, 5 questions were pertaining to job environment, and 2 questions pertained to family vs. work obligations.



#### DISCUSSION

It appears that people who work in a small business setting are more comfortable and less stressed in their jobs, which may be why they are more able to meet the demands of their iobs. Small business employees tend to have more varied responsibilities and must know more about their company, whereas corporate employees tend to serve only one function so they feel more dispensable. They are more like a "cog in the wheel" and not as valuable to the company. They have to depend on many other departments to get their job done. This may explain the greater satisfaction for small business employees with technology training and the feeling that their efforts are properly rewarded. Even though actual size of rewards at small companies may be smaller, the intimate setting may lead to greater satisfaction with the rewards provided. The greater intimacy of a small office may lead to confidence in making suggestions and expressing opinions without fear of reprisal. The small office environment suggested less conflict between balancing parenthood and job responsibilities, as well as the effect of having school-age children on hours worked. While this may be due to more flexible work hours at a small company, this issue may be confounded by the fact that some respondents did not have children. and therefore reported no conflict. A larger number of respondents, or a more representative group, such as specifically employees with children, might produce clearer results.

#### REFERENCES

Greenberg, J & Robert A. Baron. (1993). *Behavior in Organizations* (4<sup>th</sup> ed.) Boston: Allyn & Bacon.

Landy, Frank J. (1985). *Psychology of Work Behavior* (3<sup>rd</sup> ed.) Homewood: The Dorsey Press.

Schein, Edgar H. (1999). *The Corporate Culture Survival Guide*. San Francisco: Jossey-Bass Publishers.



#### COMPARISON OF AGE RELATED FACTORS IN THE WORKPLACE

Christine Guth Adele Hinckley

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#### **ABSTRACT**

Sixty-eight employees with a mean age of 39.2 years, from various workplaces in a suburb of Philadelphia served as participants. The group consisted of 27 men and 41 women. A 30-item Likert-format survey assessing perceptions of challenge and stimulation at work, consequences and rewards for performance, training effectiveness, competing family demands, and employee stress was administered to all participants. Measures of satisfaction with work place performance and willingness to engage in discretionary activities were also obtained.

#### INTRODUCTION

Previous research regarding age related job performance has produced contradictory results. One study found that young adults were more concerned with intrinsic factors in the workplace such as chances for advancement, recognition and approval, and enjoyment of their work (Rosenfeld & Owens; Schultz & Ewen, 1993). Older employees tended to be more concerned with pay, working conditions, and company policy regarding such issues as coffee breaks and absenteeism (Rosenfeld & Owens, 1965; Schulz & Ewen, 1993). Some studies of workers at various job levels do find significant declines in performance with increasing age, but numerous others do not (Schultz & Ewen, 1993). Some skills do seem to be impacted by age. Some sensory and physiological capacities decline significantly with increasing age (Schultz & Ewen, 1993). Physical skills also show a decline with age, however, some artistic and professional performance show little detriment due to aging (Shultz & Ewen, 1993). Overall, research regarding a correlation between age and job performance is inconclusive.

Traditionally theories of job satisfaction are not related to employee age. The contemporary literature links job satisfaction to various personal determinants (Greenberg & Baron, 1993). One characteristic associated with job satisfaction is status and seniority within the organization. Within a given organization, there are often clear beliefs about the appropriate age range for individuals occupying various positions (Greenberg & Baron, 1993). Advancement within the organization is often expected to be based on age, and prejudice may become a factor for those who fall outside the expected range for their position.



We anticipate a relationship between age and discretionary performance. The younger worker's desire for advancement and recognition is expected to be associated with a greater willingness to exceed job expectations. We also hypothesize that the younger workers will tend to view their jobs as more monotonous than older workers and that older workers will experience more job stress than the younger group, which could be related to their lack of initiative and eagerness to seek out greater responsibilities.

#### **METHODS**

#### **PARTICIPANTS**

Sixty-eight employees from various workplaces in a suburb of Philadelphia served as participants. The group consisted of 27 men and 41 women, with an overall mean age of 39.2 years.

#### **OUESTIONNAIRE**

A 30-item Likert-format survey was administered to all participants. The survey assessed perceptions of challenge and stimulation at work, consequences and rewards for performance, training effectiveness, competing family demands, and employee health. Measures of satisfaction with work place performance were also obtained.

#### RESULTS

A median-split technique was performed on age to create two groups, young (n=32) and old (n=35). Between-group t-tests were used to compare the young and old participants' responses to the survey items. Older respondents reported significantly greater stress while at work than their younger peers. The younger workers were significantly more likely to perceive their jobs as monotonous and beneath their abilities. They also reported taking more extra responsibilities and also were more likely than their older counterparts to report that they were rewarded for applying extra effort on projects and in their daily activities.

Variable	Young Mean SD	Old Mean SD	Т	df	р
Extra Work*	3.97 .80	3.49 .95	2.22	64	.03
Bored at Work**	2.58 .76	2.11 .90	2.25	64	.028
See Rewards for Extra Effort***	2.74 1.00	2.23 1.00	2.08	64	.04
Stress at Work***	2,97 .80	3.46 .95	2.25	64	.028



- \* Do you choose to take on additional responsibility?
- \*\* Do you consider your job to be monotonous and beneath your abilities?
- \*\*\* Do you feel as if you are properly rewarded for your efforts at work?
- \*\*\*\* Do you have a high stress level while at work?

#### DISCUSSION

It was found that older workers reported higher levels of stress than their younger coworkers. Perhaps these workers have positions of greater responsibility, and are accountable for more outcomes outside of their direct control. Alternatively, older workers may be experiencing greater burnout, having been repeatedly forced to learn and apply unfamiliar technologies in their work and expected to increase the pace of their work. In addition, problems with sleep, low energy, and physical infirmities may be more common among older workers, contributing to their greater experience of stress.

Consistent with these findings that older workers often feel more overwhelmed at work than their younger peers, who were found to choose to take on additional responsibility more often, perceived greater rewards for doing so, and often found their current jobs monotonous and beneath their abilities. These young workers are at a stage in their lives where they are proving their competence, trying to advance, and building their future security. These factors may contribute to higher levels of enthusiasm and commitment in the workplace.

#### REFERENCES

Greenberg, J & Robert A. Baron. (1993). *Behavior in Organizations* (4<sup>th</sup> ed.) Boston: Allyn & Bacon.

Schulz, R. & Robert B. Ewen. (1993). *Adult Development and Aging: Myths and Emerging Realities* (2<sup>nd</sup> ed.) New York: Macmillan Publishing.



# STRESS, MOTIVATION, TRAINING, AND PERFORMANCE IN THE WORKPLACE: AN ASSESSMENT OF DIFFERENCES BETWEEN MALES AND FEMALES

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#### ABSTRACT

Sixty-eight employees with a mean age of 39.2 years, from various workplaces in a suburb of Philadelphia served as participants. The group consisted of 27 men and 41 women. A 30-item Likert-format survey assessing perceptions of challenge and stimulation at work, consequences and rewards for performance, training effectiveness, competing family demands, and employee stress was administered to all participants. Measures of satisfaction with work place performance and willingness to engage in discretionary activities were also obtained.



#### INTRODUCTION

Sex role stereotypes are ubiquitous in the workplace. "In the workplace, one thing is clear. Gender did make a difference in the past. One look at who is leading most major corporations today will tell you we come from a culture that held leadership up as a man's job." (Geddes, 1985.) Occupational differences between the sexes are a prevalent social phenomenon in most contemporary society. Men and women tend to settle in different occupations, with different prospects and rewards. (LAU Chun Kwok, et al. 1992). Males are expected to take on roles of leadership more often, and seem to be more confident about their job performance. Females are typically more concerned with relationships, the context of the situation, and activities which do not demand overwhelming technology proficiency, (Geddes, 1998)

Research on the actual differences observed when males and females are compared shows several things. For men, self confidence is strongly and positively correlated with perceived success at work, and with the opportunity to develop technical expertise. For women, self-confidence is most strongly correlated with perceived success in their lives outside of work, and is negatively correlated with the importance of developing technical expertise. (Bailyn, et al. 1986.)

The origins of these differences probably lie in an interaction of biological and social factors. In addition, males' and females' differential workplace performance is a function of outside, non-work demands. "Occupational differences between the sexes is a complex phenomenon which is the result of a variety of factors: Early socialization, the educational system, the decisions and behavior of employees and employers in the workplace, and also social forces at the macro level, such as the legislation and the capitalistic dynamics, to mention just a few." (LAU Chun Kwok, et al. 1992). Some studies in the United States (Stockard, 1985; Mickelson, 1989) suggest that gender differences in the job market could arise from the tendency of women and men to choose different fields of study in high schools and in college.

Various suggestions have been made about why gender roles are so important in the workplace, and what effects they possibly have. It was assumed that men were more confident in the workplace, and also had a stronger feeling of fulfillment stemming from their work. Secondly, women were believed to attribute feelings of fulfillment to factors outside the workplace, and were also perceived to be less confident in positions of greater responsibility and those requiring greater technology proficiency (Bailyn, et al. 1986.)

The present study explored the differences between employed males and females in several workplace settings. It also explored the many stereotypes and differential expectations of the sexes, and their relationship to the workplace environment. Males are expected to be more competitive and more dedicated to doing overtime work. Females are expected to be more social, and because they are given fewer opportunities, to show less aspiration in their career.



#### **METHODS**

#### *PARTICIPANTS*

Sixty-eight employees from various workplaces in a suburb of Philadelphia served as participants. The group consisted of 27 men and 41 women, with an overall mean age of 39.2 years.

#### **OUESTIONNAIRE**

A 30-item Likert-format survey was administered to all participants. The survey assessed perceptions of challenge and stimulation at work, consequences and rewards for performance, training effectiveness, competing family demands, and employee health. Measures of satisfaction with work place performance were also obtained.

#### RESULTS

Survey responses from a sample of 68 adult workers drawn from the suburbs of Philadelphia were analyzed. The sample consisted of 27 males and 41 females. The majority of the respondents were employed in small businesses (n=39); the remainder worked in corporate settings (n=29).

Between-group t-tests were used to compare the responses of males and females. Significant differences emerged on several items concerning stressful situations in the workplace, job performance, employment motivation, and technology preparation. The responses of females were significantly higher than those of males on several items related to job stress. (see table 1.) Females were more likely to report staying home from work because they felt stressed. They also experienced greater exhaustion following their pre-work morning routines. Lastly, they were more prone to be tired at work, despite having gotten sufficient sleep.

With regards to performance at work, results varied for males and females. Males reported that they felt as though they met the demands of the job more often than females. Females reported that they assisted their co-workers more often than their male peers. Females also felt as though they were sufficiently rewarded for extra effort on completion of a project.

The next item of the survey queried whether the workers felt as though they received sufficient training in technology at work, and whether they felt that the training was useful. Females reported that they felt as though they had received more sufficient training in technology at work than men. They also thought that the training they received was useful in actually performing their job.

The final item of the survey asked whether workers saw their job as their primary source of social interaction. Females reported that they saw their workplace as their main source of social interaction, more so than men.



Table 1						
	M	F	t	df	р	
	X (sd)	X (sd)				
Stress at workplace		.•				
Homesick	1.22 (.42)	1.61 (.70)	<b>-</b> 2.6	66	.012	
Morning	1.40 (.76)	2.02 (1.01)	-2.65	64	.010	
Tired	2.74 (.71)	3.90 (.83)	-1.8	66	.072	
Performance at work						
Meet	4.41 (.57)	4.15 (.53)	1.93	66	.058	
Assist	3.46 (1.03)	3.90 (.94)	-1.8	65	.077	
Reward	2.22 (.89)	2.63 (1.07)	1.66	66	.10	
Sufficient and useful tra	aining for 1	technol	ogy			
Trainsuf	2.60	3.63	-4.02	66	.000	
Trainuse	(1.05) 3.41 (.97)	(1.04) 3.80 (.84)	-1.79	66	.078	
Work motivation						
Jobsoc	2.48 (1.01)	3.10 (1.11)	-2.31	66	.024	



This table lists the questions in the survey that pertain to this experiment. To the left of each question is the format used for each of the scores in table 1.

Table2			
How often do you stay home sick when you feel too stressed to handle work?			Homesick
Do morning routines (i.e., getting children ready for day care/school) leave you exhausted before your workday even begins?			Morning
Do you find yourse plenty of sleep?	elf tired at work, even if you get		Tired
Do you meet the de	emands of your job?		Meet
When your own woworkers?	ork is done, do you assist co-		Assist
Are you rewarded for applying extra effort on a project in your daily activities?			Reward
Do you feel that you have sufficient training at work in order to keep up with technology?			Trainsuf
How useful is the technology training you have been given in actually performing your job?			Trainuse
Do you consider your job to be your prime source of social interaction?			Jobsoc
M=Male	t=t-test score	<b>p</b> =probability	
F=Female	df= degree of freedom	X=mean score	
(sd)= standard dev	iation		



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